

**CLAIMS:**

1. A current generator for an electroluminescent display driver, the current generator comprising:
  - a first, reference current input to receive a reference current;
  - a second, ratioed current input to receive a ratioed current;
  - a first ratio control input to receive a first control signal input;
  - a controllable current mirror having a control input coupled to said first ratio control input, a current input coupled to said reference current input, and an output coupled to said ratioed current input;said current generator being configured such that a signal on said control input controls a ratio of said ratioed current to said reference current.
2. A current generator as claimed in claim 1 further comprising a second ratio control input to receive a second control signal input, and wherein said ratio of said ratioed current to said reference current is dependent upon a ratio of said first control signal to said second control signal.
3. A current generator as claimed in claim 1 or 2 wherein said first and second control signals comprise current signals.
4. A current generator as claimed in claim 1, 2 or 3 further comprising one or more digital to analogue convertors to provide said control signal(s).
5. A current generator as claimed in any one of claims 2 to 4 comprising a plurality of said ratioed current inputs and a corresponding plurality of said second ratio control inputs for setting a plurality of said current ratios, one for each of said second ratio control inputs.
6. A current generator as claimed in any one of claims 1 to 4 further comprising a plurality of drive connections, and a selector to select one of said drive connections as

said reference current input and another of said drive connections as said ratioed current input.

7. A current generator as claimed in claim 6 wherein said selector is coupled to said drive connections to selectively couple a selected one of said drive connections to said reference current input and another of said drive connections to said ratioed current input.

8. A current generator as claimed in claim 6 wherein said current mirror comprises a plurality of mirror units, one for each of said plurality of drive connections, and wherein said selector is configured to selectively couple at least said first ratio control input to a said mirror unit.

9. An OLED display driver comprising the current generator of any one of claims 1 to 8.

10. A current driver circuit for driving a plurality of electrodes of an electroluminescent display, said driver circuit comprising:  
a control input to receive a control signal;  
a plurality of drive connections for said plurality of display electrodes;  
a selector configured to select one of said plurality of drive connections as a first connection and at least one other of said drive connections as a second connection; and  
a driver configured to provide respective first and second drive signals for said first and second connections, a ratio of said first and second drive signals being controlled in accordance with said control signal.